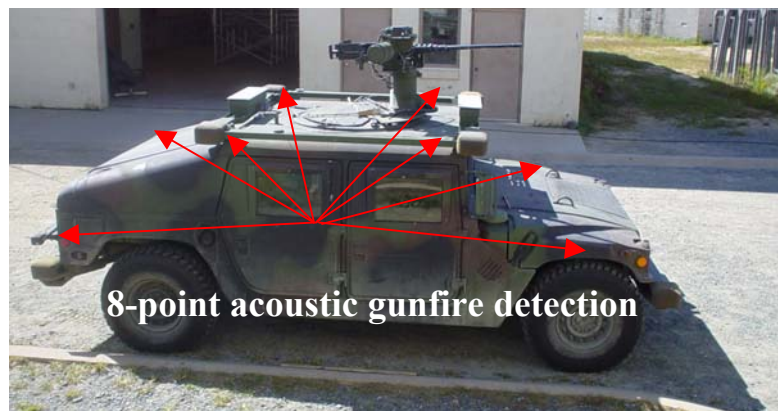


## Mobile Counter Fire System (MCFS)

**Purpose:** To develop a counter sniper system with an on the move capability



**Background:** In 1999, the Marine Corps validated a Universal Need Statement (UNS) for a sniper detection system (00299UA). At this time the Marine Corps along with the Army Research Laboratory started working on a system that would not only detect snipers location, but also counter the sniper by returning fire to that location. Additionally, this system has the ability to work while on the move.



**Description:** Mobile Counter Fire System is an eight point acoustic based gunfire detection platform that feeds a digital link into a slew to cue gun mount that will automatically slew the mounted weapon to the detected gun fire event. Once the operator makes positive target identification, he can fire remotely from inside and armored vehicle. The complete system is integrated with an inertial navigation system and global positioning system to allow the system to hold the stabilized gun mount on target while on the move. When a shot is taken at the vehicle, the sensors are able to sense the “bang” of the rifle and the “crack” of the round exceeding the speed of sound. Once these event are detected, the system software can calculate location of the shooter within 2-3 degrees of direction, + - 10 percent in range and elevation.

**Deliverable Product:** One Complete Mobile Counter Fires System with all software will be delivered to the Marine Corps Warfighting Laboratory Nov 2005 for safety evaluation being conducted at Naval Surface Warfare Center Dahlgren Division.

**Milestones:**

TASK	FY06	FY07
MCFS Delivery	▲	
LTA User Evaluation	▲ — ▲	
Operational Assessment		▲ — ▲

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